TWO

ESSAYS

IN

Political Arithmetick,

Concerning the

People, Housing, Hospitals, &c.

OF

LONDON and PARIS.

By Sir WILLIAM PETTT, Fellow of the Royal Society.

---- Qui sciret Regibus uti Fastidiret olus-

LONDON,

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34.6.



TO THE

KINGS

Most Excellent MAJESTY.

I Do presume, in a very small Paper, to shew Your Majesty, that Your City of London seems more considerable than the Two best Cities of the French Monarchy, and for ought I can find, greater than any other of the Universe, which because I can say A 2 without

Epistle Dedicatory.

without flattery, and by such Demonstration as Your Majesty can examine, I humbly pray Your Majesty to accept from

Your Majesty's

Most Humble, Loyal

and Obedient Subject,

William Petty.

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ESSAY

IN

Political Arithmetick,

BY

Sir WILLIAM PETTY,

Tending to prove that London hath more People and Housing than the Cities of Paris and Rouen put together, and is also more considerable in several other respects.

rials at London in the three last years, viz.

1683, 1684 and 1685, (wherein there was no extraordinary Sick-A 4 ness,

ness, and wherein the Christenings do correspond in their ordinary proportions with the Burials and Christenings of each year one with another) was 22337, and the like Medium of Burials for the three last Paris Bills we could procure, viz. for the years 1682, 1683 and 1684 (whereof the last as appears by the Christenings to have been very sickly) is 19887.

2. The City of Bristol in England appears to be by good estimate of its Trade and Customes as great as Rouen in France, and the City of Dublin in Ireland appears to have more Chimnies than Bristol, and consequently more People, and the Burials in Dublin

Dublin were Anno 1682 (being a fickly year) but 2263.

3. Now the Burials of Paris (being 19887) being added to the Burials of Dublin (supposed more than at Rouen) being 2263, makes but 22150, whereas the Burials of London were 187 more, or 22337, or as about 6 to 7.

4. If those who die unnecessarily, and by miscarriage in L'hostel Dieu in Paris (being above 3000) as hath been elsewhere shewn, or any part thereof, should be subtracted out of the Paris Burials aforement oned, then our affertion will be stronger, and more proportionable to what sollows

lows concerning the Housing of those Cities, viz.

- 5. There were burnt at London, Anno 1666, above 13000 houses, which being but a fifth part of the whole, the whole number of houses in the said year, were above 65000; and whereas the ordinary Burials of London have increased between the years 1666 and 1686, above one third, the total of the houses at London Anno 1686, must be about 87000, which Anno 1682, appeared by accompt to have been 84000.
- 6. Monsieur Morery, the great French Author of the late Geographical Dictionaries, who makes Paris the greatest City in the World, doth

doth reckon but 50000 houses in the same, and other Authors and knowing Men much less; nor are there full 7000 houses in the City of Dublin, so as if the 50000 houses of Paris and the 7000 houses in the City of Dublin were added together, the total is but 57000 houses, whereas those of London are 87000 as aforesaid, or as 6 to 9.

- 7. As for the Shipping and foreign Commerce of London, the common sense of all Men doth judge it to be far greater than that of Paris and Rouen put together.
- 8. As to the Wealth and Gain accruing to the Inhabitants of London and Paris by Law-fuits (or La chicane) I onely fay that the Courts

of London extend to all England and Wales, and affect feven Millions of People, whereas those of Paris do not extend near so far: Moreover there is no palpable conspicuous argument at Paris for the Number and Wealth of Lawyers like the Buildings and Chambers in the Two Temples, Lincoln's Inn, Gray's Inn, Doctors Commons, and the feven other Inns Chimnies, in which are which are to be feen at London, besides many Lodgings, Halls and Offices relating to the same.

- 9. As to the plentifull and easie living of the People we say,
- to those of London, being as about

bout 6 to 7, and the Housing of the same as about 6 to 9, we infer that the People do not live at London so close and crouded as at Paris, but can afford themselves more room and liberty.

2. That at London the Hospitals are better and more desirable than those of Paris, for that in the best at Paris there die 2 out of 15, whereas at London there die out of the worst scarce 2 of 16, and yet but a sistieth part of the whole die out of the Hospitals at London, and \(\frac{2}{3}\) or 20 times that proportion die out of the Paris Hospitals which are of the same kind; that is to say, the number of those at London who chuse to lie sick in Hospitals rather than

in their own Houses, are to the like People of Paris as one to twenty; which shews the greater Poverty or want of Means in the People of Paris than those of London.

3. We infer from the premiffes, viz. the dying scarce 2 of 16
out of the London Hospitals, and
about 2 of 15 in the best of Paris, (to say nothing of L'hostel
Dieu) That either the Physicians
and Chirurgeons of London are
better than those of Paris, or
that the Air of London is more
wholesome.

ties of the World, if Paris were the greatest, we need say no more

in behalf of London. As for Pequin in China, we have no account fit to reason upon; nor is there any thing in the Description of the two late Voyages of the Chines's Emperour from that City into East and West Tartary, in the years 1682 and 1683, which can make us recant what we have faid concerning London. As for Dely and Agra belonging to the Mogull we find nothing against our position, but much to shew the vast numbers which attend that Emperour in his business and pleafures.

11. We shall conclude with Constantinople and Gran Cairo; as for Constantinople it hath been said by one who endeavour'd to shew the

the greatness of that City, and the greatness of the Plague which reigned in it, that there died 1500 per diem, without other circumstances: To which we anfwer, that in the year 1665 there died in London 1200 per diem, and it hath been well proved that the Plague of London never carried away above \$\frac{1}{5}\$ of the People, whereas it is commonly believed that in Constantinople, and other Eastern Cities, and even in Italy and Spain, that the Plague takes away one half or more; wherefore where 1200 is but i of the People it is probable that the number was greater, than where 1500 was ²/₅ or one half, &c.

12. As for Gran Cairo it is reported, that 73000 died in 10 weeks or 1000 per diem, where note, that at Gran Cairo the Plague comes and goes away fuddenly, and that the Plague takes away 2 or 3 parts of the People as aforesaid; so as 73000 was probably the number of those that died of the Plague in one whole year at Gran Cairo, whereas at London Anno 1665, 97000 were brought to account to have died in that year. Wherefore it is certain, that that City wherein 97000 was but if of the People, the number was greater than where 73000 was ²/₅ or the half.

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We

We therefore conclude, that London hath more People, Houfing, Shipping and Wealth, than Paris and Rouen put together; and for ought yet appears, is more confiderable than any other City in the Universe, which was propounded to be proved. (13)

AN

ESSAY

IN

Political Arithmetick,

BY

Sir WILLIAM PETTY,

Tending to prove that in the Hospital called L' hostel Dieu at Paris, there die above 3000 per Annum by reason of ill accommodation.

there entred into the Hofpital of La Charité 2647

Souls, of which there died there
within the faid year 338, which

B 2 is

is above an eighth part of the said 2647, and that in the same year there entred into L' hostel Dieu 21491, and that there died out of that number 5630, which is above one quarter, so as about half the said 5630, being 2815, seem to have died for want of as good usage and accommodation as might have been had at La Charité.

there entred into La Charité 3118, of which there died 452, which is above a feventh part, and in the same year there entred into L'hostel Dieu 28635, of which there died 8397, and in both the said years 1678 and 1679 (being very different in their degrees of Morta-

Mortality) there entred into L'hostel Dieu 28635 and 21491, in all 50126, the Medium where-of is 25063, and there died out of the same in the said Two years 5630 & 8397, in all 14027, the Medium whereof is 7013.

- 3. There entred in the faid years into La Charité 2647 and 3118, in all 5765, the Medium whereof is 2882, whereof there died 338 and 452, in all 790, the Medium whereof is 395.
- 4. Now if there died out of L'hostel Dieu 7013 per annum, and that the proportion of those that died out of L'hostel Dieu is double to those that died out of La Charité (as by the above B 3 Numbers

Numbers it appears to be near there abouts) then it follows that half the faid Numbers of 7013 being 3506, did not die by natural necessity, but by the evil administration of that Hospital.

- 5. This Conclusion seem'd at the first sight very strange, and rather to be some mistake or chance than a solid and real truth, but considering the same matter as it appeared at London, we were more reconciled to the belief of it, viz.
- 1. In the Hospital of St. Bartholomew in London there was sent out and cured in the year 1685, 1764 Persons, and there died out of the said Hospital 252.

 Moreover

Moreover there were fent out and cured out of St. Thomas's Hospital 1523, and buried 209, that is to fay, there were cur'd in both Hospitals 3287, and buried out of both Hospitals 461, and confequently cured and buried 3748, of which number the 461 buried is less than an eighth part, whereas at La Charité the part that died was more than an eighth part; which shews that out of the most poor and wretched Hospitals of London there died fewer in proportion than out of the best in Paris.

2. Farthermore, it hath been above shewn that there died out of La Charité at a Medium 395 per annum, and 141 out of Les B 4 Incu-

Incurables making in all 536; and that out of St. Bartholomen's and St. Thomas's Hospital, London, there died at a Medium but 461, of which Les Incurables are part; which shews that although there be more People in London than in Paris, yet there went at London not fo many People to Hospitals as there did at Paris, although the poorest Hospitals at London, were better than the best at Paris; which shews that the poorest People at London have better accommodation in their own houses, than the best Hospital of Paris affordeth.

6. Having proved that there die about 3506 Persons at Paris unnecessarily to the damage of France,

we come next to compute the value of the faid damage and of the Remedy thereof, as follows, viz. the value of the faid 3506 at 60 li. Sterl. per head, being about the value of Argier Slaves, (which is less than the intrinsick value of People at Paris) the whole loss of the Subjects of France in that Hospital seems to be 60 times 3506 li. Sterl. per Annum, viz. 210 thousand 360 li. Sterl. equivalent to about two Millions 524 Thous. 320 French Livers.

7. It hath appeared that there came into L'hostel Dieu at a Medium 25063 per Annum, or 2089 per Mensem, and that the whole stock of what remain'd in the prece-

precedent Months is at a Medium about 2108 (as may appear by the third Line of the Table N° 5, which shall be shortly published) viz. the Medium of Months is 2410 for the fickly year 1679, whereunto 1806, being added as the Medium of Months for the year 1678 makes 4216, the Medium whereof is the 2108 above mentioned; which number being added to the 2089 which entred each Month, makes 4197 for the Number of Sick which are supposed to be always in L'hostel Dieu one time with another.

8. Now if 60 French Livers
per Annum for each of the faid
4197 fick Persons were added to
the

the present ordinary Expence of that Hospital (amounting to an addition of 251 Thousand 820 Livers) it seems that so many lives might be saved as are worth above ten times that sum, and this by doing a manifest deed of Charity to Mankind.

Memo-



Memorandum, That Anno 1685.

the Burials of London were
23222, and those of Amsterdam 6245; from whence, and
the difference of Air, 'tis probable that the People of London
are quadruple to those of Amsterdam.

FINIS.